YEAR 2000
Vulnerable Systems and Processes
Buildings, Facilities, Personal Property, and
Scientific/Laboratory Equipment

In the crisis to ensure that all computers, software, and applications are Year 2000 compliant, embedded chips in vulnerable systems and processes (non-IT technology) must be addressed. The vulnerable systems and processes include personal property, buildings and facilities, scientific /laboratory equipment, motor vehicles, and aircraft. It is important that these systems and processes be considered in Year 2000 remediation efforts.

Personal property equipment includes office equipment such as:
- *phone switches*
- *voice mail*
- *fax machines*
- *postage meters*
- *video cameras*
- *video recorders*
- *microwave ovens*
- *copy machine meter readers*
- *access equipment connected to VCR's*
- *cellular/portable phone systems*
- *calculators/registers*
- *clocks*
- *mail sorter*
- *bar code reader*
- *projector*
- *mail inserter*
- *timers*
- *scanner*
- *printer*

Motor Vehicles/Aircraft:
- *trucks*
- *cars (large/small)*
- *escalator*
- *generator*
- *humidity control*
- *boats*
- *jets*
- *airplanes*

Security Systems includes:
- *building security systems*
- *ID badges*
- *ID access badges and pass generation equipment (for building entrance, cipher locks/automatic vaults manipulation, etc.)*
- *access ID and passes readers*
- *security video cameras*
- *metal scanner*
- *secured door*
- *guard station*
- *secured gate*
- *vault*

Facility Equipment includes:
- *climate and lights control devices*
- *elevators*
- *smoke detectors*
- *electronic time clocks*
- *process control-water management-flood control*
- *sprinkler and landscaping systems*
- *parking lot gates*
- *parking lot lighting*
- *power -management functions for UPS (uninterruptable power supply)*
- *lightning*
- *emergency lightning*
- *water heating*
- *water purification*
- *water detection system*
- *fire alarm*
- *programmable thermostat*

Scientific, Field and Laboratory Equipment includes:
- *hand held devices*
- *pass stamping/production*
- *expiration dating devices-food products*
- *geographic positioning systems (GPS)*
- *electronic survey equipment*
- *environmental measuring/metering devices*
- *water level sensors*
- *radio transmitters connected to maintenance or monitoring equipment*
- *radio receivers that automatically power up to receive instructions*
- *process control-water management-flood control*
- *bar coding system devices*
- *stand alone cataloging and archiving devices*
- *testing equipment and devices*

Agencies with owned or leased buildings or facilities must ensure that all "computer controlled facility components are Year 2000 compliant." If not, it will cause the failure or malfunction of alarm systems, elevators, heating, ventilation, and air-conditioning systems, alarm systems.

The General Services Administration (GSA) is taking the lead on this initiative.

Definitions:

"Year 2000 compliant" means computer controlled facility components that accurately process date/time data (including but not limited to, calculating, comparing, and sequencing) from, into, and between the 20th and 21st centuries, and the year's 1999 and 2000 and leap year calculations.

"Computer controlled facility components" refers to software driven technology and embedded microchip technology. This includes but is not limited to, programmable thermostats, HVAC controllers, auxiliary elevator controllers, utility monitoring and control systems, fire detection and suppression systems, alarms, security systems and any other facilities control systems utilizing microcomputers.

Year 2000 problem is that embedded microchips and software record the year using the two digits such as "97 rather than four digits "1997".